



Crystal River Nuclear Plant  
Docket No. 50-302  
Operating License No. DPR-72

Ref: 10 CFR 2.202

March 9, 2004  
3F0304-05

Secretary, Office of the Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
ATTN: Rulemakings and Adjudications Staff  
Washington, DC 20555-0001

**Subject:** Crystal River Unit 3 - Twenty-Day Response to First Revised NRC Order (EA-03-009) Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors

**Reference:** NRC to FPC letter dated February 20, 2004, "Issuance of First Revised NRC Order (EA-03-009) Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors"

Dear Sir:

Florida Power Corporation, doing business as Progress Energy Florida, Inc., hereby submits the Twenty-Day response to revised NRC Order EA-03-009. The revised NRC Order establishes interim inspection requirements for the Crystal River Unit 3 (CR-3) reactor pressure vessel (RPV) head and associated penetration nozzles. The revised Order supercedes the original NRC Order dated February 11, 2003. The inspection requirements of the Order are based on industry experience with Primary Water Stress Corrosion Cracking (PWSCC) for Alloy 600.

CR-3 replaced the RPV head in Refueling Outage 13 (13R), Fall 2003. The replacement RPV head has been designed to minimize the concerns for Control Rod Drive Mechanism (CRDM) nozzle cracking and leakage associated with PWSCC of the Alloy 600 nozzle material. Alloy 690 base and weld material was used for the CR-3 CRDM nozzles on the replaced RPV head.

The replacement CR-3 RPV head is in the "Replaced" susceptibility category described in Section IV-B of the revised Order (plants with a replaced RPV head AND with a calculated value of total effective degradation years (EDY) less than 8 AND no previous inspection findings requiring classification as High).

In accordance with Section IV-C-(4) of the Order, for those plants in the "Replaced" susceptibility category, no RPV head and head penetration nozzle inspections are required during the outage in which the RPV head is replaced.

Progress Energy Florida, Inc.  
Crystal River Nuclear Plant  
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Crystal River, FL 34428

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Beginning with initial service, until the replacement RPV head reaches 8 EDY, RPV head and head penetration nozzle inspections shall be performed as follows:

- An inspection meeting the requirements of paragraph IV.C.(5)(a)[bare metal visual inspection] must be completed at least every third refueling outage or every five (5) years, whichever occurs first.
- The requirements of paragraph IV.C.(5)(b)[non-destructive (NDE) examination] must be completed at least every four (4) refueling outages or every seven (7) years, whichever occurs first.

Since CR-3 is on 24-month fuel cycles, the inspection frequency expressed in years is the most limiting.

CR-3 has reviewed the requirements stated in the revised Order and by this letter consents to implement those requirements. However, CR-3 recognizes that continuing research and operating experience regarding RPV heads with CRDM Alloy 690 base and weld material may support a request for future changes to the requirements imposed by the Order.

If you have any questions regarding this submittal, please contact Mr. Sid Powell, Supervisor, Licensing and Regulatory Programs at (352) 563-4883.

Sincerely,



Dale E. Young  
Vice President  
Crystal River Nuclear Plant


DEY/lvc

xc: Director, Office of Nuclear Reactor Regulation  
Assistant General Counsel for Materials Litigation and Enforcement  
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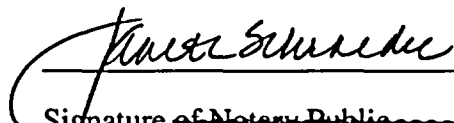

STATE OF FLORIDA

COUNTY OF CITRUS

Dale E. Young states that he is the Vice President, Crystal River Nuclear Plant for Florida Power Corporation, doing business as Progress Energy Florida, Inc.; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

  
Dale E. Young  
Vice President  
Crystal River Nuclear Plant

The foregoing document was acknowledged before me this 9th day of March, 2004, by Dale E. Young.

  
Signature of Notary Public  
State of Florida  


(Print, type, or stamp Commissioned  
Name of Notary Public)

Personally Known ☒ -OR- Produced Identification ☐